

OBSTACLES OF IMPLEMENTING TOTAL QUALITY MANAGEMENT AT FACULTY OF NURSING, DAMANHOUR UNIVERSITY

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Abstract: The higher education institutions face many challenges and pressures that resulted from shortages of funding, lack of qualified staff and faculty, high numbers of student's enrollment. **Aim:** to determine obstacles of implementing total quality management at Faculty of Nursing, Damanhour University. **Methods:** A descriptive research design was utilized. **Setting:** the study was conducted at all scientific departments at Faculty of Nursing, Damanhour University (N=9 departments). **Subjects:** All faculty staff members from the nine scientific departments at the Faculty of Nursing, Damanhour University were included (N=103) and who will be available during time of data collection. **Tools:** Tool (1): The obstacle to TQM implementation questionnaire sheet, besides, a demographic data sheet of faculty staff members. **Results:** there was a high statistically significant correlation between scientific research obstacle and scientific departments, and high statistically significant relation among all TQM obstacles. **Conclusion:** there are obstacles for TQM implementation at Faculty of Nursing, Damanhour University and ranking as: scientific research, aspects of administration, the faculty, faculty staff and community service obstacles. **Recommendations:** Developing strategies to overcome the obstacles of TQM implementation at Faculty of Nursing, Damanhour University.

Keywords: Quality, quality management, total quality management, obstacles, higher education.

1. INTRODUCTION

Nowadays, the quality is considered the main concern for all kinds of organizations specially services and educational institutions because it plays a vital role in improving their products and services.^(1, 2) Also, the Total Quality Management (TQM) in the nursing academic institutions of higher education ensure the quality of education which produces outstanding graduates who are capable of working effectively at the health care system.⁽³⁾ The nursing academic institutions face several challenges due to the speed changes in technology, privatization and globalization of education.⁽⁴⁾ All of these aspects make that it is necessary to implement the concept of TQM in them.⁽⁵⁾

Quality was defined by Shastri⁽⁶⁾ as : "meeting customer's needs and exceed their expectations". Boljevi⁽⁷⁾ defined **Quality Management** (QM) as: "managing organizational activities by using both techniques and methodologies that enable the product manufacturing and managing the results". **Total Quality Management** (TQM) was defined as: "a management philosophy that concerned with people and work processes which focuses on customer satisfaction and improves the organizational performance".⁽⁸⁾ **Total Quality Management (TQM) in the higher education** was defined as: "a set of educational standards necessary to promote the level of educational quality with low effort and cost, achieving the educational goals and objectives that meet the needs of labor market of qualified personnel".⁽⁹⁾

TQM is very important for academic educational institutions in: its positive impact on the institution's objectives, improving educational curriculum and educational process, encouraging team work with each other, making educational environment more motivating, making a culture of trust, reinforcement the speed of training services, decreasing costs, increasing the chances in competition, improving customer satisfaction and strengthen of the institutions position on the market place.⁽¹⁰⁻¹²⁾

There are many obstacles that may face the implementation of TQM at faculties of nursing, the obstacle is an object, action or a situation that causes an obstruction and make any progress difficult.^(13,14) Saeed and Fadlallah⁽¹⁵⁾ mentioned a number of challenges facing quality application in higher education institutions which were challenges related to: scientific research, management, faculty member, perception of quality importance and financial challenges. Mosadeghrade⁽¹⁶⁾ also found that the major barriers to total quality management successful implementation were five domains namely: strategic, human resource, contextual, procedural and structural barriers.

Internationally, a study was done in USA by Horine and Hailey⁽¹⁷⁾ to identify challenges to successful QM implementation in higher education. It revealed that the academic institutions face five key challenges as they try to implement QM practices namely: organizational culture, senior leadership commitment, faculty support, implementation time and training. Another study was done in Jordanian by Diri⁽¹⁸⁾ to identify the obstacles to the application of total quality management (TQM) in the business management departments in private universities and it was found that there were obstacles facing the implementation of TQM such as organizational aspect, leadership aspect, educational and cognitive aspect, scientific research aspect and community services aspect. As well as study in Bangladesh by Sohel-Uz-Zamanet. al⁽¹⁹⁾ about implementing TQM in education and it showed that the highest obstacles were the commitment from the parties involved with education system especially the top management and staff members. In Egypt, a study was done by Moustafa and Abd- Elhamid⁽⁴⁾ to develop strategies to overcome obstacles to TQM successful implementation at faculty of nursing. It revealed that there were many obstacles to successful implementation of TQM mainly: aspect of administration, faculty staff member, scientific research, community service and the organization /faculty obstacles. Hence, the present study aims to determine obstacles of implementing TQM at faculty of nursing, Damanhour University. It is hoped that such study will assist faculty of nursing and its members to identify obstacles of implementing TQM.

2. SIGNIFICANCE OF THE STUDY

This study is significant in our nursing academic institution to help its faculty staff members and administration to determine the obstacles of implementing TQM and to improve the quality of nursing education. As well as increase the chances to be a good competitor among various government and private academic universities, consequently presenting outstanding graduates in form of professional and qualified nurses who contribute in improving the quality of nursing care that is provided to the patients. Graduate nurses who can be competitive at the local and the regional level. Moustafa⁽⁴⁾ mentioned that many faculties of nursing in Egypt face a lot of obstacles which prevent the right implementation of TQM, such as: no issuing for their scientific journals, computer labs deficiency, some faculty members not convinced by the application of TQM, lack of cooperation and coordination between researchers among different universities, inappropriate students to faculty staff ratio which lead to an increase the burden of teaching load.

AIM OF THE STUDY

The aim of this study was to determine obstacles of implementing total quality management at faculty of nursing, Damanhour University.

RESEARCH QUESTION

What are the obstacles of implementing total quality management at faculty of nursing, Damanhour University?

3. MATERIAL AND METHODS

3.1 Research design: A descriptive research design was utilized.

3.2 Setting: This study was conducted at all scientific departments at Faculty of Nursing, Damanhour University (N=9 departments), namely: Nursing Administration, Medical Surgical Nursing, Pediatric Nursing, Gerontology Nursing, Community Health Nursing, Obstetric and Gynecological Nursing, Psychiatric and Mental Health Nursing, Critical Care

International Journal of Novel Research in Healthcare and Nursing

Vol. 8, Issue 2, pp: (312-325), Month: May - August 2021, Available at: www.noveltyjournals.com

and Emergency Nursing and Nursing Education. Faculty of Nursing, Damanhour University is affiliated to ministry of higher education and scientific research. It was established in 2006 with wide range of undergraduate and postgraduate educational services and scientific research.

3.3 Sample: All faculty staff members from the nine scientific departments at the Faculty of Nursing, Damanhour University (N=103) and who were available during time of data collection.

3.4 Tool of the study:

One tool employed in this study.

Tool 1: The Obstacles to TQM Implementation Questionnaire Sheet: That was developed by the researcher based on related literature^(16,4). It was used to measure the obstacles of TQM implementation. It was composed of 69 items divided into five subscales namely: aspect of administration (9 items), faculty staff member (14 items), scientific research (9 items), community service (9 items) and the faculty (28 items). Responses will be measured on a 3-point Likert rating scale ranging from (1) weak to (3) strong. Levels of obstacles as follows: weak obstacles range from 69-114, medium obstacles range from 115-16, strong obstacles range from 161-207 and total score ranges from 69-207.

In addition, **Demographic Data Sheet** was developed by the researcher and included: department, gender, position title, years of experience and marital status.

Methods:

- An official written permission was obtained from the dean of Nursing Faculty, Damanhour University to collect study data.
- The study tool was distributed to five experts in the field of the study and tested for its content validity. They were one professor from Nursing Administration Department, Alexandria University, two professors from Nursing Administration Department, El-Mansoura University and two assistant professors from Nursing Administration Department, Tanta University. The necessary modifications were done based on their comments.
- The reliability of the tool was tested statistically using Cronbach's Alpha Coefficient test to measure internal consistency of the items composing each dimension of the tool. The results of Cronbach's Alpha Coefficient test which proved to be strongly reliable (.963) for the obstacles to TQM implementation scale.
- A pilot study was carried out on 10% of total sample size of faculty staff member (N=10) who were not included in the study subjects in order to check and ensure the clarity and applicability of the tool, identify obstacles and problems that may be encountered during data collection and estimate the time needed to fill the questionnaire and the necessary modifications were done.
- Data collection for this study was conducted by the researcher by hand-delivered questionnaires to the study subjects after explanation of the aim of the study and the needed instruction was provided to them. The data collection took about two months from 1-10-2019 to 30-11-2019.

Ethical Considerations

- The research approval was obtained from the ethical committee at the faculty of Nursing –Damanhour University, prior to the start of the study.
- Before data collection, an informed written consent was obtained from the study subject for participation in the study to collect the necessary data.
- Privacy and right to refuse to participate in the study was assured.
- Confidentiality and anonymity regarding data collected was maintained.

Statistical analysis:

- The collected data were coded and entered in special format to be suitable for computer feeding. Following data entry, checking and verification process were carried out in order to avoid any errors.

- Data were analyzed using the statistical package for social science SPSS (version 20).
- The following statistical analysis measures were used:
 - **Descriptive statistical measures**, which included: numbers, percentages, and averages (Minimum, Maximum, Arithmetic mean (\bar{X}), Standard deviation (SD).
 - **Statistical analysis tests**, which included Chi square test, student t test and ANOVA test.
 - **Graphical presentation** included: Bar graphs were done for data visualization.

4. RESULTS

Table (1): Demographic characteristics of faculty staff members:

Faculty staff members demographic characteristics	Total N=103	
	No	%
Department		
▪ Nursing administration	13	12.6
▪ Medical Surgical Nursing	14	13.6
▪ Pediatric Nursing	12	11.7
▪ Gerontology Nursing	6	5.8
▪ Community Health Nursing	15	14.6
▪ Obstetric and gynecological Nursing	14	13.6
▪ Psychiatric and Mental Health Nursing	8	7.8
▪ Critical Care and Emergency Nursing	8	7.8
▪ Nursing Education	13	12.6
Gender		
▪ Female	99	96.1
▪ Male	4	3.9
Working position		
▪ Professor emeritus	2	1.9
▪ Professor	2	1.9
▪ Assistant professor	13	12.6
▪ Lecturer	27	26.2
▪ Assistant Lecturer	32	31.1
▪ Demonstrator	27	26.2
Years of experience		
▪ < 5	22	21.4
▪ 5-	45	43.7
▪ ≥10	36	35.0
▪ Min – Max 3– 25	Mean ± SD	9.160±4.607
Marital status		
▪ Married	83	80.6
▪ Unmarried	20	19.4

Table (1) shows that, Community Health Nursing department represents 14.6% which is the higher percentage between the departments. Furthermore, the vast majority 96.1% of the staff members were females and the majority 80.6% were married. Moreover, 31.1% of staff members were assistant lecturers, with respect to their years of experience, it ranged from 3 to 25 years with a mean of 9.160 ± 4.607 . Less than half 43.7% of the staff members had 5 years and more of experience.

Table (2): Obstacles of TQM dimensions as perceived by faculty staff members:

Domains	Total N= 103	
	No.	%
▪ Aspects of administration		
- Weak (9-14)	31	30.1
- Medium (15-20)	56	54.4
- Strong (21-27)	16	15.5
▪ Faculty staff		
- Weak (14-22)	36	35.0
- Medium (23-32)	56	54.4
- Strong (33-42)	11	10.7
▪ Scientific research		
- Weak (9-14)	14	13.6
- Medium (15-20)	34	33.0
- Strong (21-27)	55	53.4
▪ Community service		
- Weak (9-14)	47	45.6
- Medium (15-20)	42	40.8
- Strong (21-27)	14	13.6
▪ The faculty		
- Weak (28-46)	40	38.8
- Medium (47-65)	45	43.6
- Strong (66-84)	18	17.5
▪ Total obstacles levels		
- Weak (69-114)	30	29.1
- Medium (115-160)	60	58.2
- Strong (161-207)	13	12.6

From table (2) it was noticed that more than half 53.4% of the staff members viewed scientific research as a strong obstacles, while 54.4% of them viewed aspect of administration and faculty staff as medium obstacles with the same percentage, on the other hand 45.6% of them viewed community services as a weak obstacle. Moreover, 12.6% of the staff members had strong level of total obstacles.

Table (3): obstacles of TQM dimensions mean score as perceived by faculty staff members.

Dimensions of TQM obstacles	Mean Scores		Mean Percentage Score	Rank
	Min- Max	M ± SD		
▪ Aspects of administration	9-27	16.67 ± 4.110	61.74%	2
▪ Faculty staff	15-41	25.55 ± 6.175	60.84%	4
▪ Scientific research	9-27	20.08 ± 4.852	74.36%	1
▪ Community services	9-27	15.72 ± 4.932	58.22%	5
▪ The faculty	28-84	51.27 ± 13.825	61.03%	3
▪ Total obstacles levels	72-204	129.10 ± 28.160	62.37%	

Table (3) reveals that scientific research had the highest mean score percentage 74.36% (20.08 ± 4.852), followed by aspect of administration 61.74 (16.67 ± 4.110), while the lowest mean score percentage 58.22% (15.72 ± 4.932) was related to Community services. Moreover, the total obstacles mean score was (129.10 ± 28.160).

Table (4): Correlation Matrix between the dimensions of TQM obstacles:

Obstacles of TQM		Obstacles of TQM					
		Aspects of administration	Faculty staff	Scientific research	Community services	Faculty	Total Obstacles
Aspects of administration	R						
	P						
Faculty staff	R	0.769					
	P	0.000**					
Scientific research	R	0.294	0.384				
	P	0.003*	0.000**				
Community service	R	0.606	0.664	0.319			
	P	0.000**	0.000**	0.001**			
Faculty	R	0.728	0.665	0.419	0.660		
	P	0.000**	0.000**	0.000**	0.000**		
Total Obstacles	R	0.830	0.842	0.563	0.790	0.932	
	P	0.000**	0.000**	0.000**	0.000**	0.000**	

r = Pearson correlation * Statistically significant at $p \leq 0.05$

** Highly statistically significant at $p \leq 0.001$

$r \geq 0.9$ very high correlation

$r 0.7 - < 0.9$ high correlation

$r 0.5 -$

< 0.7 moderate correlation

$r < 0.5$ low correlation

As evident in Table (4), highly statistically significant correlation were found between aspect of administration and faculty staff, community services and faculty obstacles ($r=0.769$ $p=0.000$, $r=0.606$ $p=0.000$ and $r=0.728$ $p=0.000$ respectively). While, there is statistically significant correlation between aspects of administration and scientific research ($r=0.294$ $p=0.003$). Concerning faculty staff, highly statistically significant correlation were noticed between it and scientific research, community services and faculty obstacles ($r=0.384$ $p=0.000$, $r=0.664$ $p=0.000$ and $r=0.665$ $p=0.000$). With respect to scientific research, highly statistically significant correlation were found between it and community services, and faculty obstacles ($r=0.319$ $p=0.001$ and $r=0.419$ $p=0.000$ respectively). However, highly statistically significant correlation was found between community services and faculty obstacles ($r=0.660$ $p=0.000$). Lastly, highly statistically significant correlation were noticed between total obstacles and aspect of administration, faculty staff, scientific research, community services and faculty obstacles ($r=0.830$ $p=0.000$, $r=0.842$ $p=0.000$, $r=0.563$ $p=0.000$, $r=0.790$ $p=0.000$ and $r=0.932$ $p=0.000$ respectively).

5. DISCUSSION

Educational academic institutions have experienced a number of obstacles for implementing TQM as: Lack of employees' involvement and empowerment, lack of sufficient funds and resources, lack of employees' interest in training at the field of quality and resistance to change. So, many faculties have adopted the concept of TQM and its implementation to achieve organizational goals and increase satisfaction of faculty staff members, employees, students, stockholders and society.^(20, 21) Also, TQM at educational academic institutions will improve the educational services, product and output of

educational process, raise the efficiency of all members in the organization to ensure that the graduates have the skills, knowledge and attitude that will help them to compete in the labor market at the national and international levels.⁽²²⁻²⁴⁾

The current study related to the obstacles of implementing TQM at Faculty of Nursing, Damanhour University. A brief description of the subject will be displayed as follows: the total number of faculty staff members who shared in the study was 103 staff from the nine scientific departments which were available during data collection. The vast majorities 96.1% of the staff members were female and the majorities 80.6% were married. Moreover, less than one-third 31.1% of faculty staff members were assistant lectures, while 26.2% of them were lecturer and demonstrators with the same percentage. With respect to their years of experience, less than half 43.7% of the staff members had 5 years of experience and more.

The present study revealed that there is no relation among demographic characteristics of faculty staff members and the following obstacles: Aspects of administration, the faculty, faculty staff and community service obstacles. This result is in agreement with Moaweh (2009)⁽²⁵⁾ who explored the differences in the averages of estimates study sample towards TQM application in nursing colleges in the different Middle East Universities in Amman, Jordan from the viewpoint of administrators, department heads and faculty members. Which revealed that, there is no significant difference between demographic characteristics and barriers of implementing TQM.

While, Algadheeb and Almeqren (2014)⁽²⁶⁾ study to identify the scientific research obstacles facing faculty staff members in the College of Education at Princess Nora bint Abdul Rahman University, Saudi Arabia and to determine the differences in the obstacles according to age, academic rank, scientific specialty, marital status, number of completed studies, and time since the last academic rank was received which revealed that, there is no significant difference for TQM obstacles with respect to academic rank or scientific specialization. Also, Al-Daibat and Al-Daibat(2016)⁽²⁷⁾ study to identify the impact of TQM application obstacles on TQM level application at Jordanian private universities which was done on academic deans and department chairs. It revealed that, there is no statistically significant difference between demographic characteristics and obstacles of TQM implementation.

Also, the present study revealed that there was a highly statistically significant relation between scientific departments as one of the demographic characteristics of Faculty of Nursing staff and scientific research obstacle of TQM. This result is due to there are only three scientific departments having postgraduate studies they are: Nursing Administration Department, Community Health Nursing Department and Nursing Education Department. Also, difficulty in obtaining a full-time basis to carry out scientific research in some over loaded departments.

This result is in agreement with Karimian et.al (2012)⁽²⁸⁾ study related to identify internal obstacles to scientific research as perceived by faculty staff members at Shiraz University of Medical Sciences, Iran. Which revealed that, there are significant relation between departments or field of the study and obstacles of scientific research. Also, he stated that, insufficient skills in writing scientific paper and lack of individual motivations for research were reasons for scientific research obstacle.

However, Kurdi and Remawi (2015)⁽²⁹⁾ study to identify the scientific research obstacles from the faculty staff members' from their view point at the Humanitarian Colleges of Al-Quds University, platinewhich found that, there was a statistically significant relation between scientific research and academic departments which was done on faculty staff members' at the Humanitarian Colleges of Al-Quds University. He confirmed that, not obtaining a full-time basis to carry out scientific research, insufficient desire by the researchers in scientific research and development, and the production of scientific research will not make the financial differences for them were strong reasons for scientific research obstacle.

Also, the result of the present study is in the same line with the finding of Hatamleh (2016)⁽³⁰⁾ study to estimate the existence of the scientific research obstacles' degree from the view point of faculty staff members at the University of wall, Jordan which concluded that, weak the benefit from scientific research result, insufficient incentives and rewards to support research and limit time available to perform scientific research were the causes for scientific research obstacle.

In addition, another study done by Abo El-khair (2016)⁽³¹⁾ to identify the obstacles to the application of TQM from the view point of the faculty staff members, academic leaders and administrators in the colleges of education at Gaza Strip Universities (Al-Quds Open University, Palestine and Al-Aqsa University) which revealed that, there were significant relation between TQM obstacles implementation and specialties or departments. Also, he concluded that weak the financial support for scientific research and increase faculty staff teaching load have an effect on scientific research. But

this finding is inconsistent with Hatamleh (2016)⁽³⁰⁾ who concluded that, there are no statistically significant differences between scientific research and specialization.

The protocol of this study approved from the Damanhour University in 23th September 2019. And data collected starting 1st of October 2019 till end of November 2019, i.e. before Faculty of Nursing accredited from National Authority for Quality Assurance and Accreditation of Education in 5th of October 2020. That is why most of the obstacles of TQM mentioned has been corrected or modified in preparation of accreditation.

The present study revealed that, the obstacles of implementing TQM are ranking as the following: firstly, scientific research then aspects of administration, the faculty, faculty staff and lastly community service obstacle. Also, it revealed that there were highly statistically significant correlation between total obstacles and aspects of administration, faculty staff, scientific research, community services and the faculty obstacle.

As regard to scientific research obstacle, it was ranked as the 1st obstacle for implementing TQM and there was a highly statistically significant correlation among it and faculty staff, community service and faculty obstacle. While, there was a statistically significant correlation between it and aspects of administration obstacle.

This result may be due to insufficient emotional and financial motivation offered to faculty staff members, insufficient budget allocated to scientific research from University, absence of information and statistics Universitycenters, no scientific journal for Damanhour faculty of nursing to publish scientific researches, increase faculty staff members teaching load which have negative impact on scientific research, lack of assistance and support from hospitals which refuse to allow data collection inside them.

This result is in the same line with a study was done by Tian et.al(2011)⁽³²⁾ to identify challenges of TQM implementation from the standpoint of faculty staff members at China Universities, Saeed and Fadlallah (2015)⁽¹⁵⁾ study to review the main barriers which are facing TQM application from the view point of faculty staff members at Sudan higher education institutions, Moustafa and Abd –Elhamid (2017)⁽⁴⁾ study to develop strategies to overcome the obstacles of TQM successful implementation at faculty of nursing, Zagazig University, Egypt from the view point of faculty staff members which was ranked scientific research as the 1st obstacle for TQM implementation at higher education.

While, a study was done by Alghamdi et.al (2013)⁽²⁴⁾ to describe some Asian TQM case study in order to summarize the most important factors for successful implementation of TQM at Asian universities from the view point of faculty staff members which revealed that, the scientific research was a strong obstacle for implementing TQM in higher education institutions due to insufficient financial support for scientific research, lack of cooperation and communication among researchers and departments in the universities. Moreover, Al-Najjar and Al-Jawad (2014)⁽³³⁾ done study to exploring obstacles of TQM application in the Iraqi private colleges from the perspective of faculty staff members which was concluded that, unavailability of scientific research budget and scientific journals in the universities considered the main reasons for scientific research obstacle .

Also, this result is compatible with Singale et.al (2016)⁽³⁴⁾ study to show how higher education can benefit from the advantages of TQM and how it can be implemented. It revealed that, scientific research and publication has an effect on TQM implementation. However, Moustafa and Abd –Elhamid (2017)⁽⁴⁾ mentioned some reasons for weakness of scientific research as: Lack of interest in scientific research among faculty staff members and they are not satisfied in this field, lack of budget for scientific research, increasing of teaching load on faculty staff members and its negative impact on scientific research.

On the other hand, sabra et.al (2020)⁽³⁵⁾ conducted study to identify obstacles of implementing TQM in higher education institutions from academic staff perspective in Nursing, Engineering, Arts and commerce Faculties at South Valley University, Egypt which confirmed that, there was a significant relation between scientific research, community services and the faculty obstacles. He mentioned some obstacles for TQM as: Lack of moral incentives provided to enrich scientific research, insufficient participation of private sector in the faculties programs and resistance to change. But faculties must pay attention to the factors that prevent successful implementation of TQM.

As regard to aspects of administration obstacle, this was ranked as the 2nd obstacle for TQM implementation and there was a highly statistically significant correlation among it and faculty staff, community service and faculty obstacle. This

result was due to some academic leaders are not convinced by the application of TQM, ambiguity of strategies and policies related to TQM implementation, sometimes decision-making are centralized, the criteria for selecting academic leaders are not complies with the professional criteria, insufficient training programs that develop the faculty members competencies.

The result of this study is in the same line with Sabra et.al (2020)⁽³⁵⁾ and study done by Al-Kayed and Al-Tahrawi (2020)⁽³⁶⁾ to identify principles of TQM implementation barriers in Princess Alia University, Oman, Jordan from teaching staff view point who ranked aspects of administration as the 2nd obstacle for implementing TQM in the education. Also, this result is in agreement with Said (2008)⁽³⁷⁾ study to identify the impediments of TQM application as perceived by faculty staff members in the Palestinian Universities in Gaza Strip and determine the ways to overcome these impediment which clarified that, the lack of professional development programs was a reason for aspects of administration obstacle. While, another study done by Talib et.al (2011)⁽³⁸⁾ to understand the mutual interaction of the barriers and identify the driving barriers (i.e. which influence the other barriers) and the dependent barriers (i.e. which are influenced by others) at India Universities on faculty staff members which revealed that, lack of quality awareness at management level and inability to change organizational culture affect implementation of TQM in higher education.

Moreover, Ardi et.al(2011)⁽³⁹⁾ study to assess the relationships among quality dimensions in higher education and to determine the effect of each quality dimension on students' satisfaction in Engineering Faculty at Indonesian State University while, Al- Tashah (2013)⁽⁴⁰⁾ done study to identify the obstacles of TQM application from the view point of the academic leaders in Kuwait higher education institutions, moreover Sohel-Uz-Zaman and Anjalim (2016)⁽¹⁹⁾ done study to identify the challenges which may impeded the application of TQM in education at United International University, Dhaka, Bangladesh which was done on teaching staff, Aljuhani (2019)⁽⁴¹⁾ done study to determine challenges to successful TQM implementation in Saudi higher education institutions as perceived by faculty staff members who stated that, insufficient top management commitment and the high degree of centralization of decision-making lead to different problems in implementing TQM inside the organization and in every field.

However, study done by El-faituri(2012)⁽⁴²⁾to assess the level of TQM implementation and explore the influence of organizational culture on TQM implementation in the Faculty of Business, Education and Professional Studies at the University of Gloucestershire, United kingdom on faculty staff members which revealed that, lack of top management commitment toward implementing of TQM, poor staff training, absence of the quality policy and inappropriate reward and recognition systems are major reasons for quality failure.

Also, this result is consistent with a study done by Sadikoglu and Oclay (2014)⁽⁸⁾to investigate the impacts of TQM practices on various performance measures as well as the reasons and the barriers of the TQM practices as perceived by staff members at Gebze Institute of Technology, Turkey. Altahayneh (2014)⁽⁴³⁾ study to investigate the application of TQM principles as regarding to colleges of physical education faculty staff members in Jordan. In addition, the study examined the extent to which these faculty members differ in their perceptions and the extent to which differences in perceptions were influenced by rank, educational level and years of experience. It revealed that, the successful training is necessary to enhance awareness of TQM and its implementation among academic leaders and faculty staff members.

While, Al-Najjar and Al-Jawad (2014)⁽³³⁾, Moustafa and Abd -Elhamid (2017)⁽⁴⁾found that, there were significant correlations between aspects of administration, faculty staff members, community service and the faculty obstacles of TQM implementation in higher education. Also, found that some academic leaders are not convinced by the application of TQM and there is negligence for faculty staff member's complaints and suggestions from the faculty administration which affect TQM implementation. Moreover, AlKhatib et.al (2019)⁽⁴⁴⁾ found that, the administrative obstacle affecting on the levels of higher education.

As regard to the faculty obstacle, this was ranked as the 3rd obstacle for TQM and there was a highly statistically significant correlation between it and faculty staff, community service. This result was due to long and complicated period of procedures is taken to promote faculty staff members, lack of objective criteria to measure their performance, insufficient resource and some services are inefficient in the faculty as: Internet services, elevators, photocopying, cafeteria services, absence of medical clinic inside the faculty to perform first aids for simple illness cases and inefficiency of data show devices and microphones. Also, the noise generated from faculty students.

This result is in agreement with Al-Edadi (2012)⁽⁴⁵⁾ to explore TQM application obstacles in King Khalid University, KSA which was done on faculty staff members, AlKhatib et.al (2019)⁽⁴⁴⁾ study to identify the obstacles of implementing TQM in the Palestinian higher education institutions, in addition to determine the role played by the accreditation and quality commission in the ministry of education and higher education to overcome these obstacles who ranked faculty obstacle as the 3rd obstacle of TQM implementation in higher education.

Moreover, said (2008)⁽³⁷⁾ mentioned reasons for faculty obstacle as: Lack yards for students to take break, class room next to each other and this may cause noising for working class. While, Al-Refai et.al (2012)⁽⁴⁶⁾ identify obstacles and problems that prevent the application of TQM as perceived by faculty staff members and administrators in the divisions of accounting at Public Universities in Jordan which revealed that, lack standard to measure faculty staff members performance and long period procedures to promote faculty staff were causes for faculty obstacle. On the other side, Sadikoglu and Oclay (2014)⁽⁸⁾ stated that, sufficient resources, periodic maintenance for faculty building were support TQM implementation successfully.

On the other hand, Habbal and Jreisat (2018)⁽⁴⁷⁾ was done study to identify the challenges of TQM implementation facing faculty staff members (professor, associate professor, assistant professor, lecturer) from four different colleges as follows: Business and Management, Humanitarian Studies, Education and Computer Science at UAE Universities, Calitatea which found that, there were a significant relation among faculty, community service and faculty staff obstacles of TQM. He mentioned some causes for the faculty obstacle which are: Improper working condition, lack of standards for measuring staff performance, long promotion process for faculty staff members.

As regard to the faculty staff obstacle, this was ranked as the 4th obstacle for TQM and there was a highly statistically significant correlation with it and with community service obstacle. This result was due to insufficient financial and moral incentives for faculty staff members, unsuitability ratio of faculty staff members to students in some scientific departments, insufficient awareness of faculty staff members to the principles of TQM implementation, inadequacy of the required faculty staff position levels, reliance on teaching by traditional methods, poor human relationships among faculty staff members and participation of faculty staff members in the administrative tasks.

The result of this study is in the same line with O'Mahony and Garavan (2012)⁽⁴⁸⁾ who done study to report and analyze the lessons learned from implementation of a quality management system within an IT Division in a higher education at public universities in the Republic of Ireland from the view point of faculty staff members, Suleman and Gul (2015)⁽⁴⁹⁾ were done study to explores the challenges faced by teaching staff in successful implementation of TQM at Pakistan Universities who ranked the faculty staff obstacle as the 4th obstacle for implementing TQM. While, Al-Tasheh (2013)⁽⁴⁰⁾ stated that lack of highly qualified professionals and specialties among faculty staff was a strong obstacle of TQM implementation in higher education.

However, Al-Daibat and Al-Daibat(2016)⁽²⁷⁾ mentioned that, the reliance on traditional teaching methods have an negative effect on quality of education and there was a statistically significant relation between society and faculty staff obstacle for implementing TQM. Also, Habbal and Jreisat (2018)⁽⁴⁷⁾ stated that, the faculties administration must provide a lot of positive moral and financial incentives for faculty staff members. The result of this study is inconsistent with said (2008)⁽³⁷⁾ who stated that, insufficient participation of faculty staff members in administrative task was a cause of the faculty obstacle.

As regard to community service obstacle, this was ranked as the last obstacle for TQM implementation. This result was due to insufficient of determining needs of hospitals in the community which is reflected on nursing training programs for students, ineffective use for multi-media to enlighten the community by the faculty mission and goals, lack of community participation in different faculty activities.

This result is compatible with a study done by Sebastianelli and tamimi (2003)⁽⁵⁰⁾ to examine the obstacles associated with managing a successful quality transformation at Scrantonon University which was done on quality managers, Mehralizadeh and Oghaddam (2010)⁽⁵¹⁾ study aim to what extent the idea of TQM system (Deming, ISO, Baldrige, and EFQM) which is borrowed from business is applicable in a higher education institution at Shahid Chamran University, Ahwaz, Iran who ranked the community service as the last obstacle for TQM. However, Al-Daibat and Al-Daibat(2016)⁽²⁷⁾ stated that, poor coordination between faculty administration and employment institutions to determine

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the community needs affect graduates quality. While, Moustafa and Abd –Elhamid (2017)⁽⁴⁾ confirmed that, there was a significant correlation among community service and the faculty, scientific research, faculty staff and aspects of administration. Also, found that lack of investment potential of the labor market in the implementation of training activities in their programs, improper uses for multi-media to enlighten the community with the faculty mission were strong reasons for community service obstacle.

6. CONCLUSION

The results of the present study showed that, there are some obstacles for TQM implementation at Faculty of Nursing, Damanhour University and ranking as: scientific research, aspects of administration, the faculty, faculty staff and community service obstacles. It revealed that, there was a highly statistically significant correlation between all scientific departments and subscale scientific research obstacle. Also, it revealed that there were high statistically significant correlations among all TQM obstacles.

7. RECOMMENDATIONS

1. Developing workshops for academic leaders, faculty staff members and employees about polices and strategies of TQM implementation.
2. Encourage faculty staff members to participate in decision making and problem solving regarding TQM implementation issues.
3. Establish standards for academic leader's selection complies with the international standards.
4. Increase the scientific research funding and motivate faculty staff members with incentives.
5. Issuing a scientific journal for the Faculty of Nursing, Damanhour University.
6. Reducing the teaching burden load on faculty staff members while conducting scientific research.
7. Establish research and statistical centers at the university to serve scientific research.
8. Conducting training programs for developing faculty staff member's competencies.
9. Facilitating the procedures which were taken for the promotion of faculty staff members.
10. Enlighten the community by the faculty mission, vision and goals.

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